

INTRODUCTION

Human Nature and Pop Culture

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He who understands baboon would do more toward metaphysics than Locke. Charles Darwin, M Notebook, 1838

You might be asking yourself, why a special issue on evolutionary approaches to studying popular culture? After all, isn't evolutionary psychology focused on reproductive success and the ancestral environment? The aspects of pop culture featured in this issue, such as TV shows and horror films, were not a feature of our ancestral world. They don't seem to directly relate to reproductive success. They don't have obvious ties to the environment (whether it be geographical or temporal) in which we evolved. So, what could an evolutionary perspective possibly add to our understanding of them as aspects of our modern world?

The punch line is that we created these media products using our evolved brains, and that we interact with them using these brains. There might not actually be werewolves running around New York City, but we evolved the capacity to imagine them, to consider problems that need solutions, and to play out situations that evoke a sense of astonishment. Indeed, there are many aspects of our modern environment and our behavior that are best understood under the light of an evolutionary perspective. For example, much attention has been focused in recent years on the increase in obesity, especially in the United States, and how one possible cause includes the overconsumption of fast food. The reality is, that for millions of years, humans who stored fat during times of abundance had an advantage over others when food was scarce, and hence they were favored by natural selection. A taste for fatty and sweet foods would also have been favored by natural selection, as they were relatively rare (e.g., honey, ripe fruit) or required hard work to obtain (e.g., hunting for meat) and yet were important sources of calories (Burnham & Phelan, 2000; Saad, 2007). In the modern world of fast food, it is all too easy to get such foods without expending much energy, and so we end up overweight. We end up with a mismatch, in that our bodies evolved to want these foods and to enjoy them, but sadly, we did not also evolve a way to ensure we don't eat too much of them, as the latter would not have been a problem during our evolutionary past. In a similar vein, Salmon and Symons (2004) used evolutionary thinking about human sexuality to explain an unusual genre of erotica produced by and for women. Slash fiction is

largely created by and for heterosexual women and yet focuses on romantic and sexual relationships between two male expropriated media characters, such as Kirk and Spock from *Star Trek* or Clark Kent and Lex Luthor from *Smallville*. At first glance, such stories seem an unlikely choice for heterosexual females. But these stories often epitomize ideal aspects of female mate choice, including intense bonds of commitment, strong friendships before engaging in a sexual relationship, all of which involve high-mate-value men.

Evolutionary approaches have already been used in the fields of literary theory and art. The field of Darwinian literary studies, which is quickly gaining considerable momentum, has provided evidence that humankind's evolved history influences the topics of texts (Carroll, 1995). For example, one can study Jane Austen's novels and learn about women's mating strategies (Strout, Fisher, Kruger, & Steeleworthy, 2010) or analyze the content of folk tales from around the world to document sex differences in mate preferences (Gottschall, Martin, Quish, & Rea, 2004). One can also explore topics of Western paintings, and see that the most frequent topics are not random, but instead reflect topics that can be predicted by theory that is informed by evolution (Fisher & Meredith, in press).

Like pop culture, literary theory (and the study of art) has been dominated by a variety of perspectives, such as social constructivism, postmodernism, and deconstructionism (including Marxist, feminist, and psychoanalytic frameworks), which have focused more on a blank-slate view of human behavior. Even those working within these fields have commented on the stagnation that has resulted from this narrow perspective of human behavior (e.g., Carroll, 1995). Psychologists should not be surprised; after all, Freud and Lacan, e.g., are basically footnotes in our understanding of human behavior in modern psychology programs. We've achieved a better understanding of the human mind since the 1930s (which was the last decade of Freud's life). At last, the study of literature and art is starting to benefit from the work of those who are applying that new understanding. For examples from the literary and art fields, there are a number of anthologies including *The Literary Animal*, edited by Jonathan Gottschall and David Sloan Wilson, the journal founded by Alice Andrews called *The Evolutionary Review: Art, Science and Culture*, and books like *Homo Aestheticus* by Ellen Dissanayake, *The Rape of Troy* by Jonathan Gottschall, and *The Art Instinct* by Denis Dutton. In the end, this new understanding is all about the important *why* questions: *Why* do people spend so much time engrossed in worlds of fiction or other imaginary social worlds? *Why* do particular genres rise and fall (as in music or comedy)? After establishing that the reason is linked to human nature, we can then begin to tease apart various factors. For example, how much of a show's success is due

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to its appeal to universal aspects of human nature, and how much is due to other factors (such as attached prestige, celebrity of promoters, etc.)? By using evolution to inform our scholarly endeavors, we arrive at a far more satisfying and comprehensive understanding (see Saad, this issue for a general review of these issues, as well as for a detailed discussion on the success and the resistance to the evolutionary framework).

What Is Evolutionary Psychology and What Does it Bring to Pop Culture?

There are lots of definitions of what an evolutionary perspective on the mind entails, and for this special issue, we'd like you to consider the following. The focus of evolutionary psychology is on how evolution, via natural and sexual selection, has shaped human bodies, minds, and behavior, and how culture has emerged out of our evolved nature. If we think about the problems humans faced over most of our history as a species, they fall into three main groups: problems of survival, problems of mating and parenting, and the problems of social living. If we look at the content of pop culture, whether it's plot lines to movies (see Garcia et al., 2012) or TV shows (Fisher, 2012), song lyrics (Kurzban, 2012), pornography (Salmon, 2012), a comedian's repertoire (Khule et al., 2012), tattoos (Carmen et al., 2012), superheroines (Ingalls, 2012) or social networking (Crosier et al., 2012), the heart of the matter is often the ways in which people deal (successfully or not) with these same ancestral problems in the modern world. For example, horror films (typically viewed through a Freudian psychoanalytic lens, see Clasen, 2012) often travel very well between cultures. The genre itself is defined by people's reactions to what they are watching. The focus is on fear, one of many emotions that are adaptations that have helped us (and other species) survive and reproduce over historical time. Experiencing fear without the risk of real live dangers is seen as enjoyable for many people. The desire to experience such things second hand may function to help us learn a variety of different types of information, including how to better read the minds of others, cues of social dangers, and possible solutions to such dangers (Grodal, 2009). Stories allow us to gather a collection of experiences (even if we did not personally experience them) involving problems or conflicts that we can later draw upon to solve problems of our own. We watch what happens and take notes on the outcomes of the strategies and tactics others use in pursuing their goals (see Barkow et al., 2012, and DeBacker, 2012).

A suggestion of one of the founders of literary Darwinism, Joseph Carroll, was that it is important to investigate texts both in terms of human universals and individual differences in life-history strategies, such as mating and parenting (Carroll, 2005). Indeed, while many evolutionary psychologists focus on human universals (Brown, 1991; Buss, 2011), some also focus on individual differences (Buss, 2009; Figueredo et al., 2005; Kaplan & Gangestad, 2005). For example Jonason and colleagues (2012) review the dark triad of personality traits, and how they tie into reproductive outcomes. Others take this one step further and examine adaptive behavioral flexibility, such as that seen in life-history theory (LHT; Figueredo et al., 2006; Salmon, Figueredo & Woodburn, 2009). LHT describes the allocation of limited material resources to the goals of survival and reproduction. According to LHT, resources are first partitioned into *somatic* effort, invested in

the survival of the individual, and *reproductive* effort, invested in the production of offspring. Reproductive effort is further partitioned into *mating* effort, the acquisition and retention of sexual partners, and *parental* effort, the survival of existing offspring. A *slow* life-history strategy is one that emphasizes somatic and parental effort, whereas a *fast* life-history strategy is one that emphasizes reproductive and mating effort (Bogaert & Rushton, 1989; Figueredo et al., 2005; Stearns, 1992). Many plotlines exemplify this behavioral flexibility. For example, think of the music video that shows a gang member with low life expectancy following a risky discounting strategy. He's involved in crime, a run-of-the-mill thug, and then suddenly, his environmental conditions change to one of high life expectancy (attaining money and other resources, as well as getting the girl). There is a shift from focusing on one day at a time, to keeping what he has won for the future he now expects to live.

Despite individual differences in preferences for certain types of stories and storytelling, humans in all cultures (and potentially across all eras) spend significant time participating in storytelling and fictional worlds. These worlds engage our emotions in ways similar to real events and experiences. Tooby and Cosmides (2001) suggest that "humans have evolved specialized cognitive machinery that allows up to enter and participate in imagined worlds" (p. 9). As a result, we engage not only in the worlds seen in modern media products, but our children engage in pretend play, allowing them to further develop their senses of others' minds and motivations. The absence of such pretending in children is often a sign of developmental problems (such as autism).

Another area of evolutionarily informed research particularly relevant to our enjoyment of many types of media pertains to the problem of being a cooperative, reciprocating species. Being successful at the reciprocity game involves a variety of skills or adaptations, including the ability to detect defectors, freeloaders, or cheaters (Cosmides, 1989; Cosmides, Barrett, & Tooby, 2010). The successful maintenance of groups based on such a system also promoted the evolution of moral emotions. People want to see cheaters punished and admire those individuals who are the punishers, especially when they are seen as altruistic punishers (who willingly incur a cost with no benefit in order to punish cheaters). The social and moral emotions that guide our behavior (trust, fairness, revenge) are at the center of many works of art and popular culture (Flesch, 2007). Indeed, one need only attempt to imagine a sitcom or soap opera without these elements—what would one have left for a storyline?

Why Are Some Stories and Themes, Whether in Pop Culture or Shakespeare, so Appealing?

The majority of fictional tales are representations of our social world and, as such, cannot only be used to inform, but also to influence the behavior of other people (Sugiyama, 1996). They are full of the natural patterns and concerns of life, and the rewards and dangers of the behavioral choices people can make. In many cases, those choices will be condoned or condemned, which is the morality-play aspect of stories. For the reader/listener, they are a source of information about choices and their consequences. For the creator, they are a way to influence or direct choices. In that sense, they are appealing to the producer and consumer. "Culture translates human nature into social norms and shared imaginative

structures” (Carroll, Gottschall, Johnson, & Kruger, 2010, p. 213). Products of popular culture focus on how social behavior plays out among individuals pursuing specific goals. Their success or failure is the plotline (whether of a movie or a comedian’s routine). Take, for example, the humor of a stand-up comedian, as reviewed by Khule and Pollack (2012). They propose that the reason the humor of comedian Chris Rock resonates with audiences is because there is some truth to what he says, that the audience can relate to it, and to the experiences that he describes.

To spin this argument another way, Barkow, O’Gorman, and Rendell (2012) review how cultural transmission is an important aspect of actually being human. They discuss how it is (or is not) potentially influenced by mass media products, and provide many avenues for future researchers to explore. For example, how do people acquire and edit information they obtain from the media? Are there individual differences in this process that can be predicted by evolutionary theory?

The Breadth of Popular Culture

We take the stance of media theorist John Fiske, in that we view pop culture as dynamic, never achieved but always moving toward somewhere. When reviewing Fiske’s body of work, theorists Glynn, Gray, and Wilson (2010) show that he proposed that it is not something that is simply passed down through the generations, but instead, something created or modified with each social transmission (for a review see Fiske, 2010). Fiske espouses that pop culture is a resource that can be drawn upon in daily life, and represents part of the material people use to shape their lives. Although Fiske does not provide an evolutionary spin, and might in fact dislike our use of his work here, at the very core, the argument we are all making is the same one: pop culture is a part of human nature, and can provide information that is relevant to our daily existence. We go one step further and propose that the products of pop culture can be predicted based on problems we faced in our ancestral history: problems of mating and parenting, surviving, and social living. Where we part ways is that Fiske focuses on societal issues such as power, “Popular culture is made by various formations of subordinated and disempowered people out of the resources, both discursive and material, that are provided by the social system that disempowers them” (Fiske, 1989, p. 2), among other factors, as a way to best view pop culture. However, the fact that there is an area of overlap indicates that there is a space for us to explore, and one that hopefully initiates a dialogue between media theorists and those who work within an evolutionary framework. In our opinion, scholars can examine the intersection of pop culture and evolutionary psychology, and arrive at a more comprehensive and meaningful interpretation of cultural products than has ever before been attempted.

As demonstrated by the variety of topics in our special issue, there are several ways in which evolutionary psychology intersects with popular culture. Based on the work of our contributors, there seems to be two overarching themes, although we acknowledge that they overlap considerably. The first is how cultural transmission (of mass media products in general, and pop culture products specifically) relates to predictions that can be made based on evolutionary theory. Saad starts at the beginning and explains how various products should be seen as cultural artifacts, similar to the artifacts a paleoanthropologist might uncover and investigate, to

arrive at conclusions about human physical evolution. However, he also examines the transmission of evolutionary psychology within popular culture, such as how blogging can be used to transmit various findings. Barkow, O’Gorman, and Rendell provide an overview of cultural transmission and how it leads to specific, testable predictions. Indirectly, Carmen, Guitar, and Dillon follow the lead of Barkow et al. by specifically focusing on tattoos, which they partly examine using the principles of cultural transmission. Although one might not immediately think of tattoos within the same breath as these other products, tattoos are a form of art and a way to transmit various types of information. They have also become increasingly part of popular culture, at least within the United States. Thus, Carmen et al., reflect on the development of this popularity, and come to show that tattooing relates to core evolutionary principles, such as the handicap theory, and how tattoos can be influenced by cultural transmission. De-Backer spans this theme (and the next), as she looks at the creation of stars, the information they are transmitting to audiences, and how stars (and the relationship they have to audiences) can be understood using an analysis grounded in evolutionary theory. That is, she analyses celebrity status to determine how, and more importantly, why, audiences form parasocial relationships with these famous individuals.

For the second theme, some of our contributors agree with Saad’s perspective and examine specific cultural products and explain how they can be best understood using evolutionary theory. Salmon examines pornography and romance, and how these are similar and different, and how they reflect sex-specific mating interests. Garcia, Reiber, Massey, and Merriwether look at the history of short-term uncommitted sexual “hook-ups” in popular culture, and show how they reflect both evolutionary sex differences and changing social and sexual scripts. Khule and Pollack focus on the comedian Chris Rock, in an effort to show that his notoriety stems from his sophisticated use of taking information that is true, to some degree, and reflects sex differences in evolved mating interests, for example. Kurzbahn discusses country music lyrics, and argues that listeners pay attention because these songs contain information about social interactions that reflect human’s evolved history, such as the need to take revenge and feelings of sexual jealousy. Jonason, Li, Webster, Schmitt, and Crysel interlink individual differences in life history theory with dark triad personality traits to investigate the antihero in pop culture. They take the novel position of arguing that the dark side of human nature, as exhibited by James Bond or The Dark Knight (Batman), for example, confer sizable benefits, evolutionarily speaking. Fisher analyses themes within the highly popular TV show *Dallas*, in order to show that the global popularity of the series likely rested on its adherence to evolutionarily relevant themes. Ingalls examines female heroes created by women, in an effort to show that the sex of the creator matters and is reflected in the features of the heroes. She presents evidence that the characteristics of these female heroes, as developed by men and women, can be predicted using sex-specific theories based on evolutionary psychology. Clasen then examines horror, as a genre, to show that it represents a valuable vehicle for understanding the ways that evolutionary theory and sociocultural contexts overlap. To understand the increasing array of social networking tools, Crosier, Webster, and Dillon show how the

use of these tools reflects humans' evolved sociality. They further explore the influence social networking may have on the development of pop culture.

This special issue by no means addresses all the ways in which evolutionary psychology and popular culture intersect. However, it does represent a good start to understanding this area, and hopefully will propel future researchers into new directions. There is a formidable amount of work that can be performed, and thus, these papers should be seen as springboards. In fact, most of the articles actually contain direct references to experiments that should be performed in the future.

We close by admitting that this was an extremely enjoyable special issue to put together. Our contributors were enthusiastic to talk about these topics, and happily worked with us throughout the entire process. The reviewers, in every single case, returned carefully thought-out reviews on time, which renewed our faith in the academic review process. This issue could not have been the success it is without the hard work of the contributors and the reviewers, and we thank them all.

References

- Barkow, J. H., O'Gorman, R., & Rendell, L. (2012). Are the new mass media subverting cultural transmission? *Review of General Psychology, 16*, 121–133.
- Bogaert, A. F., & Rushton, J. P. (1989). Sexuality, delinquency, and r/K reproductive strategies: Data from a Canadian university sample. *Personality and Individual Differences, 10*, 1071–1077. doi:10.1016/0191-8869(89)90259-6
- Brown, D. E. (1991). *Human universals*. Philadelphia, PA: Temple University Press.
- Burnham, T., & Phelan, J. (2000). *Mean genes—from sex to money to food: Taming our primal instincts*. Cambridge, MA: Perseus.
- Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences? *Perspectives on Psychological Science, 4*, 359–366.
- Buss, D. M. (2011). *Evolutionary psychology: The new science of the mind* (4th ed.). Boston, MA: Allyn & Bacon.
- Carmen, R. A., Guitart, A. E., & Dillon, H. M. (2012). Ultimate answers to proximate questions: The evolutionary motivations behind tattoos and body piercings in popular culture. *Review of General Psychology, 16*, 134–143.
- Carroll, J. (1995). *Evolution and literary theory*. St Louis, MO: University of Missouri Press.
- Carroll, J. (2005). Human nature and literary meaning: A theoretical model illustrated with a critique of *Pride and Prejudice*. In J. Gottschall & D. S. Wilson (Eds.), *The Literary Animal* (pp. 197–216). Evanston, IL: Northwestern University Press.
- Carroll, J., Gottschall, J., Johnson, J., & Kruger, D. (2010). Imagining human nature. In B. Boyd, J. Carroll, & J. Gottschall (Eds.), *Evolution, literature & film: A reader* (pp. 211–218). New York, NY: Columbia University Press.
- Clasen, M. (2012). Monsters evolve: A biocultural approach to horror stories. *Review of General Psychology, 16*, 222–229.
- Cosmides, L. (1989). The logic of social exchange: Has natural selection shaped how humans reason? Studies with the Wason selection task. *Cognition, 31*, 187–276. doi:10.1016/0010-0277(89)90023-1
- Cosmides, L., Barrett, C., & Tooby, J. (2010). Adaptive specializations, social exchange, and the evolution of human intelligence. *Proceedings of the National Academy of Sciences, 107*, 9007–9014. doi:10.1073/pnas.0914623107
- Crosier, B. S., Webster, G. D., & Dillon, H. M. (2012). Wired to connect: Evolutionary psychology and social networks. *Review of General Psychology, 16*, 230–239.
- De Backer, C. J. S. (2012). Blinded by the starlight: An evolutionary framework for studying celebrity culture and fandom. *Review of General Psychology, 16*, 144–151.
- Dissanayake, E. (1992). *Homo Aestheticus: Where art comes from and why*. New York, NY: Free Press.
- Dutton, D. (2009). *The art instinct: Beauty, pleasure and human evolution*. New York, NY: Bloomsbury Press.
- Figueredo, A. J., Sefcek, J. A., Vasquez, G., Brumbach, B. H., King, J. E., & Jacobs, W. J. (2005). Evolutionary personality psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 851–877). New York, NY: Wiley.
- Figueredo, A. J., Vásquez, G., Brumbach, B. H., Schneider, S. M. R., Sefcek, J. A., Tal, I. R., . . . Jacobs, W. J. (2006). Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review, 26*, 243–275. doi:10.1016/j.dr.2006.02.002
- Fisher, M., & Meredith, T. (in press). An evolutionary-guided tour of Western paintings: 1400–1892. *The Evolutionary Review*.
- Fisher, M. L. (2012). Why who shot J. R. matters: *Dallas* as the pinnacle of human evolutionary television. *Review of General Psychology, 16*, 200–207.
- Fiske, J. (1989). *Reading the popular*. London, UK: Unwin Hyman.
- Flesch, W. (2007). *Comeuppance: Costly signaling, altruistic punishment and other biological components of fiction*. Cambridge, MA: Harvard University Press.
- Garcia, J. R., Reiber, C., Massey, S. G., & Merriwether, A. M. (2012). Sexual hookup culture: A review. *Review of General Psychology, 16*, 161–176.
- Glynn, K., Gray, J., & Wilson, P. (2010). Reading Fiske and understanding the popular. In J. Fiske, *Understanding popular culture* (2nd ed., pp. xxxix–lvii). New York, NY: Routledge.
- Gottschall, J. (2008). *The rape of Troy: Evolution, violence, and the world of Homer*. Cambridge: Cambridge University Press.
- Gottschall, J., Martin, J., Quish, H., & Rea, J. (2004). Sex differences in mate choice criteria are reflected in folktales from around the world and in historical European literature. *Evolution and Human Behavior, 25*, 102–112.
- Gottschall, J., & Wilson, D. S. (Eds.). (2005). *The Literary Animal*. Evanston, IL: Northwestern University Press.
- Grodal, T. (2009). *Embodied visions: Evolution, emotion, culture and film*. Oxford, UK: Oxford University Press.
- Ingalls, V. (2012). Sex differences in the creation of fictional heroes with particular emphasis on female heroes and superheroes in popular culture: Insights from evolutionary psychology. *Review of General Psychology, 16*, 208–221.
- Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crysel, L. (2012). The antihero in popular culture: Life history theory and the dark triad personality traits. *Review of General Psychology, 16*, 192–199.
- Kaplan, H. S., & Gangestad, S. W. (2005). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 68–96). New York, NY: Wiley.
- Kuhle, B. X. (2012). It's funny because it's true (Because it evokes our evolved psychology). *Review of General Psychology, 16*, 177–186.
- Kurzban, R. (2012). Cheatin' hearts & loaded guns: The high fitness stakes of country music lyrics. *Review of General Psychology, 16*, 187–191.
- Saad, G. (2007). *The evolutionary bases of consumption*. Mahwah, NJ: Erlbaum.
- Saad, G. (2012). Nothing in popular culture makes sense except in the light of evolution. *Review of General Psychology, 16*, 109–120.
- Salmon, C. (2012). The pop culture of sex: An evolutionary window on the worlds of pornography and romance. *Review of General Psychology, 16*, 152–160.

- Salmon, C., Figueredo, A. J., & Woodburn, L. (2009). Life history strategy and disordered eating behavior. *Evolutionary Psychology, 7*, 585–600.
- Salmon, C., & Symons, D. (2004). Slash fiction and human mating psychology. *Journal of Sex Research, 41*, 94–100. doi:10.1080/00224490409552217
- Stearns, S. G. (1992). *The evolution of life histories*. Oxford, UK: Oxford University Press.
- Strout, S., Fisher, M., Kruger, D., & Steeleworthy, L. (2010). Pride and prejudice or children and cheating? Jane Austen's representations of female mating strategies. *The Journal of Social, Evolutionary, and Cultural Psychology, 4*, 317–331.
- Sugiyama, M. S. (1996). On the origin of narrative: Storyteller bias as a fitness-enhancing strategy. *Human Nature, 7*, 403–425.
- Tooby, J., & Cosmides, L. (2001). Does beauty build adapted minds? Toward an evolutionary theory of aesthetics, fiction, and the arts. *SubStance, 30*, 6–27.

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